



8/15/2013

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

AUG 15 2013

Thomas C. McEntee
International Dioxide Inc.
554 Ten Rod Road
North Kingston, RI 02852

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

Subject: ADOX® 3125
EPA Registration No. 9150-7
Application Dated: June 18, 2013
Receipt Dated: June 21, 2013

Dear Mr. McEntee:

This acknowledges the receipt of your Amendment application dated August 1, 2013 in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended.

Submission and Proposed Changes

To add precautionary statement for ingestion, "**Harmful if Swallowed**", based on oral toxicity category III data (p.3), directions for use for "Irrigation water and Irrigation Water System" (p. 8), "NSF Nonfood Compounds listing (p.2), and listing of optional target pest microorganisms (p.9). The original proposed submitted label dated May 6, 2013, was updated June 5, 2013 (pin punch 08/05/13).

Comments and Conditions:

Based on the review of the submitted materials, the amended label dated June 5, 2013 (pin punch 08/05/2013) **is acceptable.**

General Comments:

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. The next label printing of this product must use this labeling unless subsequent changes have been approved. You must submit one (1) copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

This amendment and a copy of this letter have been inserted in your file for future reference

If you have any questions or comments concerning this letter, please contact David Liem at liem.david@epa.gov or call (703) 305-1284.

Sincerely,



Demson Fuller
Acting Product Manager - Team 32
Regulatory Management Branch II
Antimicrobials Division (7510P)

Att: Accepted stamped label

3/11

[0001] – MASTER LABEL

ADOX® 3125

25% AQUEOUS SODIUM CHLORITE SOLUTION

[0002]

PRECURSOR FOR CHLORINE DIOXIDE AND ACIDIFIED CHLORITE SOLUTIONS
FOR INDUSTRIAL USE ONLY

[0003]

Active Ingredients

Sodium Chlorite ----- 25%

Other Ingredients ----- 75%

Total: 100%

[0004]

KEEP OUT OF REACH OF CHILDREN

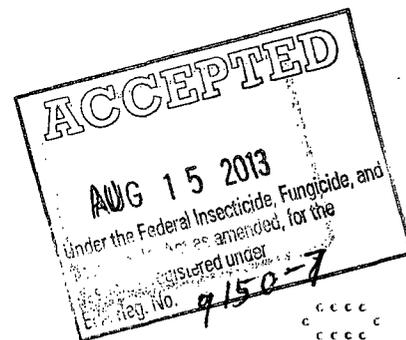
[0005]

DANGER

[0006]

See Side Panels for Additional Precautionary Statements

[0007]



FIRST AID

If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

If swallowed: Call poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

If inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

For 24 hour emergency information on this product, call Chemtrec at 1-800-424-9300 (US, Canada, Puerto Rico, Virgin Islands) 1-703-527-3887 (All Other Areas). Medical Emergency 1-800-441-3637 (outside U.S. 302-774-1000)

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.

4/11

June 5, 2013 ADOX® 3125 Master Label – Harmful if Swallowed Irrigation
Note to Reviewer --- TEXT IN [BRACKETS] IS OPTIONAL

EPA Reg. No.9150-7

[0008]
EPA Reg. No. 9150-7

[0009]
EPA Est. No. XXXXXX-YYY-ZZZ

[0010]
NET CONTENTS _____ GAL.

[0011]
Manufactured For:
INTERNATIONAL DIOXCIDE, INC.
40 Whitecap Drive
North Kingstown, RI 02852



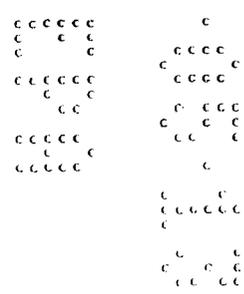
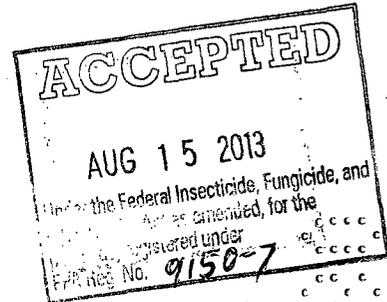
Certified to NSF/ANSI 60
Max. Use Level 28 mg/L



LISTED (147743)



Nonfoods Compounds CATEGORY D2



5/11

[0012]

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[0013]

ADOX® is a registered trademark of International Dioxide Inc., a DuPont Company.

[0014]

**PRECAUTIONARY STATEMENTS
HAZARDS TO HUMAN & DOMESTIC ANIMALS**

[0015]

DANGER.

CORROSIVE: Causes irreversible eye damage and skin burns. Do not get in eyes or clothing. Wear safety glasses or goggles, protective clothing, and rubber gloves when handling this product. Harmful if swallowed. Avoid breathing vapors. Vacate poorly ventilated area as soon as possible. Do not return until strong odors have dissipated. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse."

ACCEPTED
AUG 15 2013
The Federal Insecticide, Fungicide, and
Rodenticide Act as amended, for the
pesticides registered under
EPA Reg. No. 9150-7

[0016]

ENVIRONMENTAL HAZARDS

This product is toxic to fish, aquatic invertebrates, oysters, and shrimp. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

[0017]

PHYSICAL AND CHEMICAL HAZARDS

DANGER: This product becomes a fire or explosive hazard if allowed to dry. Strong oxidizing agent. Mix or dilute into water only. Mixing with acids, or alcohol, or other chemicals may cause evolution of chlorine and chlorine dioxide gas which is toxic and may be explosive. Combustible materials contaminated with ADOX® 3125 may burn rapidly. Keep handling areas and equipment clean and free of oils, greases, combustibles, and dust. Do not contaminate this product with garbage, dirt, organic matter, paint products, solvents, acids, vinegar, beverages, oils, pine oils, dirty rags, or other foreign matter. Do not expose to hot surfaces, sparks or open flame.

6/11

[0018]

STORAGE AND DISPOSAL

DO NOT CONTAMINATE WATER, FOOD OR FEED BY STORAGE OR DISPOSAL.

PESTICIDE STORAGE: Store upright in cool, dry and well-ventilated place. Avoid excessive heat or freezing. Protect from contact with other chemicals; avoid storage with organic chemicals, acids, reducers and combustible material. Keep container tightly closed when not in use. In case of spills, flush and drain promptly to sewer with large quantities of water. Do not allow liquid to dry out because this could present a fire hazard. If fire occurs, extinguish with large volume of water. Avoid exposure to high temperatures during storage. Store remote from other chemicals and combustible materials. Do not skid or slide drums.

PESTICIDE DISPOSAL: Do not contaminate water, food or feed by storage or disposal. Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label directions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

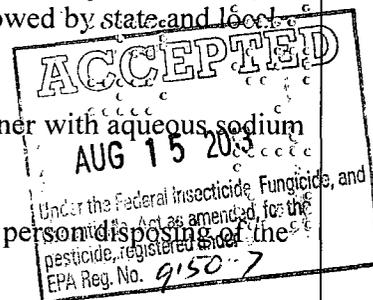
[CONTAINER DISPOSAL: Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip back and forth several times. Turn the container over onto its other end and tip back and forth several times. Empty the rinsate into application equipment or mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.]

[CONTAINER DISPOSAL: Refillable container. Refill this container with aqueous sodium chlorite only. Do not reuse this container for any other purpose.

Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller.

To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.]

EMERGENCY HANDLING: In case of contamination or decomposition, do not reseal container. Isolate in an open, well-ventilated area. Flood with large volumes of water. Cool unopened drums in vicinity by water spray.



7/11

[0019]

WARRANTY: Seller expressly warrants that the product conforms to its chemical description. There are no warranties associated with the sale of the product either express or implied including, but not limited to, the warranties of fitness for a particular purpose or use.

[0020]

DIRECTIONS FOR USE

[0021]

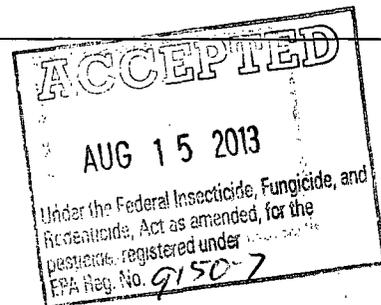
It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

[0022]

[METHOD OF APPLICATION ADOX® 3125 is a precursor for the generation of chlorine dioxide. [DO NOT ADD ADOX® 3125 directly to the system being treated.] Chlorine dioxide solutions can be generated from ADOX® 3125 by several common methods including:

1. The chlorine method which utilizes a ADOX® 3125 and chlorine gas, or
2. The hypochlorite method which utilizes ADOX® 3125, a hypochlorite solution and an acid or,
3. The Acid-Chlorite method which utilizes ADOX® 3125 and an acid, or
4. The electrolytic method which utilizes ADOX® 3125, with sodium chloride as needed.

ADOX® 3125 can also be used to form acidified sodium chlorite solutions by mixing the product with Generally Recognized As Safe (GRAS) acids such as citric, phosphoric or acetic acid. Add the generated chlorine dioxide solution to a point in the system which ensures uniform mixing. Your International Dioxide, Inc. representative can guide you in the selection, installation and operation for feed systems.]



8/11

[0023]

APPLICATIONS

[0024]

[POTABLE WATER AND WASTEWATER DISINFECTION: For most municipal and other potable water systems, a chlorine dioxide residual concentration up to 2.0 ppm is sufficient to provide adequate disinfection. Typically, the target residual concentrations range from 0.20 – 0.75 ppm. Monitor the distribution system to ensure that the chlorite concentration does not exceed its maximum contaminant level (MCL) of 1 mg/L and that chlorine dioxide does not exceed its maximum residual disinfection level (MRDL) of 0.8 mg/L. For wastewater and sewage applications, residual chlorine dioxide concentrations up to 5.0 ppm are generally adequate.]

[0025]

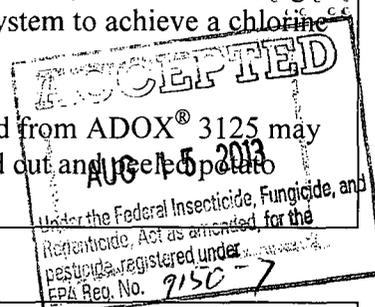
[POTABLE WATER SYSTEMS: Nitrification: to control the build up of nitrification in the water distribution system. Utilize a chemical metering system to add this product so that the resulting dose of chlorine dioxide or sodium chlorite to control nitrification does not exceed the MRDL of 0.8mg/L for ClO₂, or the MCL of 1.0 mg/L for chlorite ion.

Use of this product in public water systems (drinking water utilities) triggers monitoring and compliance requirements under 40 CFR 141. Among other requirements the user of this product is required to conduct daily monitoring for chlorine dioxide and chlorite at the point of addition and to comply with standards for chlorine dioxide and chlorite. The user of this product is required to contact State or primary drinking water programs to determine specific monitoring, compliance, reporting, and record-keeping requirements in order to avoid adverse human health effects and/or non-compliance with such requirements.”]

[0026]

[FOOD PROCESSING PLANTS, DAIRIES, BOTTLING PLANTS AND BREWERIES, FOOD PLANTS PROCESS WATER. For microbial control in typical food processing water systems, such as flume transport, chill water systems, hydrocoolers, and retort cooling water, apply ADOX® 3125 through a chlorine dioxide generation system to achieve a chlorine dioxide residual concentration ranging from 0.25 to 3.0 ppm.

Residual concentrations of up to 5.0 ppm chlorine dioxide generated from ADOX® 3125 may also be used as a water sanitizer for fruit and vegetable washing and cut and peeled potato products followed by a subsequent potable water rinse.]



[0027]

[POULTRY PROCESSING WATER: Use ADOX® 3125 to generate chlorine dioxide for use as an antimicrobial agent in water used in poultry processing in an amount not to exceed 3 ppm residual chlorine dioxide as determined by an appropriate method.]

9/11

[0028]

[AQUEOUS DISINFECTION SYSTEMS FOR CIP CLEANING: If the concentration of chlorine dioxide generated from ADOX[®] 3125 exceeds 5.0 ppm, a potable water rinse must follow treatment. Care must be taken to ensure the biological and chemical quality of the potable water.]

[0029]

[GENERAL INDUSTRIAL PROCESS WATER TREATMENT (OILFIELD INJECTION WATER, WHITE WATER PAPER MILL SYSTEMS, AND RECIRCULATING COOLING TOWERS): For control of microbial slime, these systems will require a chlorine dioxide residual concentration ranging between 0.25 and 5.0 ppm.]

[0030]

[ONCE THROUGH COOLING WATER SYSTEMS: Control of mollusks can be effectively accomplished using ADOX[®] 3125 as directed in commercial and industrial once through cooling water systems. ADOX[®] 3125 may be fed on a continuous or slug basis depending on the degree of system fouling.
SLUG DOSE: Add 42 to 210 lbs. of chlorine dioxide per million gallons of water (5 to 25 ppm).
CONTINUOUS DOSE: Add 2 to 16 lbs. of chlorine dioxide per million gallons of water (0.25 to 2 ppm).]

ACCEPTED
AUG 15 2013
Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the purposes registered under EPA Reg. No. 9150-7-040 CFR 180.940

[0031]

[IN FOOD PROCESSING FACILITIES

For use as a terminal food contact surface sanitizing rinse conforming to paragraph (b) and (c) not requiring a subsequent potable water rinse. This solution may be used on hard surfaces such as dairy processing equipment, food processing equipment and utensils.

1. All equipment & utensils must be thoroughly cleaned to remove gross food particles and soil by pre-flush or pre-scrape and where necessary a pre-soak treatment. The surfaces or objects must then be cleaned with a detergent or cleaner followed by a potable water rinse before application of the sanitizing solution.
2. To prepare a 200 ppm chlorine dioxide sanitizing use solution add 6 oz. of ADOX[®] 3125 to 50 gallons of water and then acidify to pH 2.6 with a Generally Recognized As Safe (GRAS) acid such as hydrochloric, citric, phosphoric or acetic acid or add 20 grams of Activator C or 175 grams of Activator K to the solution. Allow to stand for at least 15 minutes before use. Alternatively to minimize worker handling, an automated system can be utilized that will safely react ADOX[®] 3125 with a GRAS Acid and safely dilute the solution to the 200 ppm chlorine dioxide sanitizing use solution.
3. Fill, immerse, circulate, wipe or spray the target surface with the sanitizing solution making sure the surface area is thoroughly wet for at least one minute. Hard to reach in-place equipment, pipes, closed vessels, etc. must be filled with the sanitizing solution to

10/11

ensure contact of all surfaces. Use suitable breathing apparatus when spraying the solution on external equipment.

4. Allow the sanitizing solution to drain from all treated surfaces and air dry. Do not rinse treated surface.
5. The above solution must not be reused for sanitizing, but can be diluted 1:5 with water and used for cleaning of walls, floors and drains of the plant.]

[032]

[IRRIGATION AND IRRIGATION WATER SYSTEMS

IRRIGATION: To control bacteria, algae and slime in irrigation piping and emitters for field and greenhouse/hothouse applications treat continuously or with a slug dose.

WATER RESERVOIRS: To control bacteria, algae, slime, and reduce nitrification treat continuously or with a slug dose.

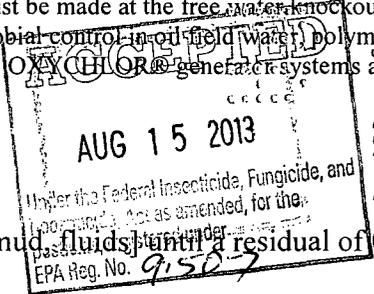
SLUG DOSE: 42 to 210 pounds of chlorine dioxide per million gallons of water (5 to 25 ppm).

CONTINUOUS DOSE: Add 2 to 16 pounds of chlorine dioxide per million gallons of water (0.25 to 2 ppm).]

[0033]

[DIRECTIONS FOR TREATING ENHANCED OIL & GAS EXPLORATION AND RECOVERY SYSTEMS including primary, secondary or tertiary oil and gas recovery plus oil sands processing waters.

[NOTE: Addition of chlorine dioxide generated from ADOX® 3125 must be made at the free water knockouts before or after the injection pumps and injection well headers. For microbial control in oil field water, polymer or micellar floods, water-disposal systems, or other oil field water systems, OXYCHLOR® generator systems are the preferred method of addition.]



[Continuous Feed Method:]

- Treat water [aqueous solutions, suspensions, dispersions, mud fluids] until a residual of 0.25 to 10.0 ppm chlorine dioxide is achieved.

The required dosage rate, frequency and concentration of chlorine dioxide can vary for each individual user, depending on severity of contamination, temperature and pH. Typical concentrations of chlorine dioxide are between 0.25 and 5.0 ppm above the chemical (chlorine dioxide) demand of the system on a continuous basis, but may require up to 10.0 ppm

The aqueous chlorine dioxide stream from the generator must always be injected or introduced below the surface of the treated water/suspension/fluid/slurry, preferably while flowing or mixing. Allowing the aqueous chlorine dioxide stream to free-fall through air results in a loss of chlorine dioxide gas to the atmosphere.]

